

TOBACCO INDUSTRY RESEARCH COMMITTEE
350 FIFTH AVENUE NEW YORK 1, N. Y.

6 Budget Plan

Salary
Expendable Supplies
Application For Research Grant

Overhead
Other

Date: September 29, 1954

1. Name of Investigator: George E. Moore, M.D., Ph.D. and Fred E. Bock, M.S.

2. Title: Director, Roswell Park Memorial Institute Institute is under the Pan to Health Department of New York State. Its major interest is study of the physiology, pathology, cause and nature of malignancy.

3. Institution

& Address: Roswell Park Memorial Institute, Buffalo 3, N.Y. (Health Research, Inc., a non-profit corporation for the administration of research projects for the staff of the above named Institute.)

4. Project or Subject: An investigation of the physiological effects of direct inhalation of tobacco smoke by laboratory animals and the study of the biological response of laboratory animals to continuous ingestion of diet-tobacco product mixtures. (Additional information is presently at the Institute except in biological areas where it is not directly pertinent to the request at hand. The most important point is the additional personnel to care for the large number of animals to be used in experiments and for drilled rats (mice) to be used in the construction of smoking chambers. (See previous and previous grant request dated Sept 14, 1953 to Dr. C. C. Little, Director.)

5. Detailed Plan of Procedure (Use reverse side if additional space is needed): Several chambers have been designed to expose small laboratory animals directly to the mainstream smoke of tobacco products. This method has the following advantages:

- (1) The mainstream smoke enters the nests directly; this avoids the "wash-out" inherent in the introduction of smoke into large chamber.
- (2) Uniform temperatures and rate of burning can be obtained.
- (3) Ease of performing toxicity tests with various tobacco products (filter tips, etc.).
- (4) Adaptation to smoking animals with tracheotomies.

One such apparatus (figure 1&2) has been used for nine months. A uniform two-second puff of smoke is drawn into the animal chamber every minute. The interval can be varied with the use of a variable transformer. The first model (illustrated) had six units. Our present model has six eight units, each of which serve two chambers. The distance between the chamber and cigarette has been shortened to two centimeters. The experiments to date have been limited to methodology and toxicity studies of several strains of mice. There are definite strain differences. In general, the mice maintained a normal growth curve with exposure to the smoke of six cigarettes per day. Each mouse is in the chamber about one hour and thirty minutes. The mice are smoked as early in the day as possible so as to reduce the effect upon nocturnal feeding.

- (3) Test tobacco blends to see if they have the same properties as the commercial ones.
- (5) Testing different blends (one at a time) to see if they have the same properties as the commercial ones.
- (7) Evaluate the experiments done on mice and judge effectiveness of various tobacco blends if it is probable.

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3 continued--

With additional support it is proposed to:

- (1) Enlarge the experimental groups of mice and include additional strains by the construction of additional smoking "machines."
- (2) Include guinea pigs, hamsters and rats in similar studies with the construction of special chambers.

(3) Test tobacco products processed in different ways for their physiological reactivities.

3 (4) Briefly study the biological effectiveness of cigarette filters, cigarette smoke (5) Investigate the possibility of maintaining small animals (6) guinea pigs with tracheotomies and exposing them to tobacco smoke. New money is in the budget for (6) Enlarge present program involving studies of the biological response of various laboratory animals to the continuous ingestion of food cigarette tobacco product mixtures for long periods of time.

3 (7) Each of facilities available include animal laboratories and chemical and physical laboratories. Other studies concerned with tobacco tar fractionation are also being pursued concurrently. Staff members with wide knowledge in the fields of geo-accord biophysics, biochemistry and biology are available for consultation.

3 (8) The monies requested are for support in addition to that furnished by New York State to smoking subjects upon whose sources, etc., etc.

3 (9) This grant request is by Health Research, Inc., which is a non-profit membership corporation for the purpose of administering bequests,

3 (5) funds, grants, and fellowships designated for Research at Roswell Park and Memorial Institute. This arrangement allows us to circumvent State

3 (10) financial policies. It is being used for administering grants from the American Cancer Society, U.S.P.H.S. and others at the present time.

3 (11) to tobacco companies always subject to the maximum amount of money to be used for the purpose of research.

3 (12) Deliberately left blank for signature of Dr. George E. Moore, M.D., B.P.D., M.A. B.S. and Dr. Bock, M.A.

3 (13) Deliberately left blank for signature of Dr. George E. Moore, M.D., B.P.D., M.A. B.S. and Dr. Bock, M.A. B.S.

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3 (20) Deliberately left blank for signature of Dr. George E. Moore, M.D., B.P.D., M.A. B.S. and Dr. Bock, M.A. B.S.

Intercept Research for nicotine adda

Date: September 20, 1962

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TOBACCO INDUSTRY 342
350 FIFTH AVENUE

6. Budget Plan:

Salaries	\$19,120.00
Expendable Supplies	8,400.00
Applies to Permanent Equipment	760.00
Overhead	2,262.40
Other	
Date: 30	Total: \$30,542.40

7. Anticipated Duration of Work: **3 years**, B.A., M.B. and Final M.B. Rock, A.B.

8. Facilities and Staff Available: Roswell Park Memorial Institute is under the Public Health Department of New York State. Its major interest is study of the etiology, diagnosis, cause and nature of malignancy.

3. **Institutional Address.** A full time permanent research and clinical staff numbering approximately 100 are present. Basic research units include Biochemistry-- Dr. Pressman, Chief; Biology--Dr. Hauschka, Chief; Biophysics-- Dr. Hoffman, Chief. Ample laboratory facilities and instruments are available for general support of research problems. The Institute maintains its own animal colonies and can provide inbred animals for most studies.

9. Additional Requirements: The project requirements for this request are above and in addition to the staff presently at the Institute engaged in biological research, some of which is directly pertinent to the request at hand. The most important need is for additional personnel to care for the large number of animals to be used in experiments and for skilled machinists to aid in the construction of special smoking chambers. (See previous preliminary grant request dated September 14th forwarded to Dr. C. C. Little, Chairman.)

10. Additional Information (Including relation of work to other projects and other sources of supply):

At the present time related research is being carried on at the Institute as follows:

118
(1) Fractionation of tobacco tar and testing of individual fractionations
for carcinogenicity.

(2) Preliminary experiments concerned with the toxicity of tobacco products added to the diet of laboratory animals.

(3) Design of individual chambers for the direct smoking of small laboratory animals.

the right hand part of the body is very weak and cannot support the body.

其後數日，子雲上書曰：「臣聞周之興也，其德猶若此。」

1. *Experiments on the action of several species of fungi*

卷之三

17. *Leucanthemum vulgare* L. (1753) *Leucanthemum vulgare* L. (1753) *Leucanthemum vulgare* L. (1753)

Signature: /s/ George E. Moore, M.D.

Director of Project E. Moore, Inc.

Director, Roswell Park Memorial Institute
Deputy Treasurer, Health Research, Inc.

Business of George E. Moore, M.D.

Source: <https://www.industrydocuments.ucsf.edu/docs/iijm0000>

Source: <https://www.industrydocuments.ucsf.edu/docs/jjvn0009>

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Signature: /s/ George E. Moore, M.D. Director of Project

Director, Roswell Park Memorial Institute
Deputy Treasurer, Health Research, Inc.

1st Captain E. Moore, M.D.
Business Office of the Estimation

Proposed Budget for One Year (from previous preliminary grant dated
September 14, 1954)

I PERSONNEL

(1) two machinists (part-time for 6 months)	\$2,300.00
(2) two animal attendants at \$2,800	5,600.00
(3) Senior laboratory animal caretaker \$3,100	3,100.00
(4) Principal laboratory technician \$3,920	3,920.00
(5) Research biologist (70% part-time)	4,200.00

II PERMANENT EQUIPMENT

(1) Vacuum pumps (2)	410.00
(2) Drying oven	350.00

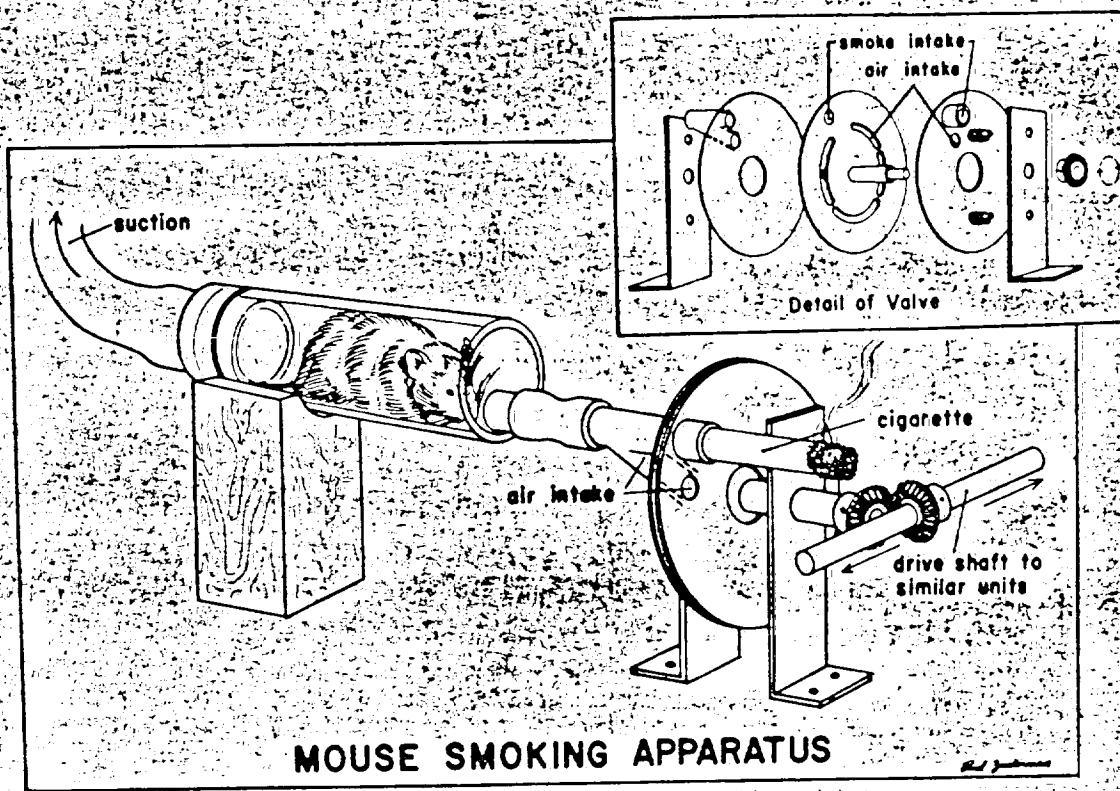
III SUPPLIES

(1) Food, sawdust, etc., for mice and rats (partial support)	3,500.00
(2) Tobacco products (partial support)	2,400.00
(3) Glassware, slides, cover slips, etc.	400.00
(4) Brass tubing, gears, lucite, clock motors, etc. for construction of smoking apparatus	2,100.00

INSTITUTIONAL OVERHEAD 8% 2,262.40

TOTAL **\$30,542.40**

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